



IFW

**PATENT**  
Attorney Docket No. 403404

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Appln. of:

TOIDE et al.

Art Unit: 2832

Application No. 10/540,157

Examiner: Unassigned

Filed: June 21, 2005

For: PERMANENT-MAGNET  
SYNCHRONOUS MOTOR AND  
METHOD OF MANUFACTURING THE  
SAME

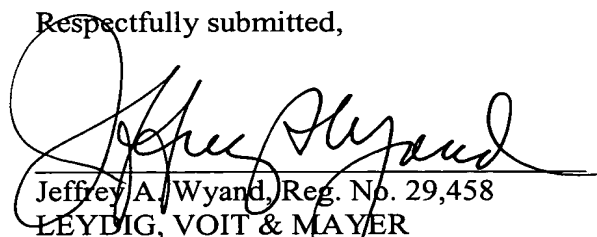
**SUBMISSION OF ENGLISH LANGUAGE TRANSLATION OF IPER**

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop Amendment  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Dear Sir:

Applicants submit an English language translation of the International Preliminary Report and Written Opinion that issued June 26, 2006 for the international patent application on which the U.S. patent application is based.

Respectfully submitted,



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Date: August 8, 2006  
JAW:ves

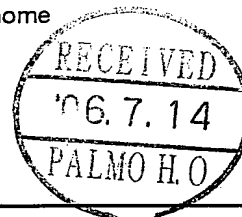
From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

OIWA, Masuo  
14-1, Minamitsukaguchi-cho 2-chome  
Amagasaki-Shi, Hyogo 661-0012  
JAPON



Date of mailing (day/month/year) 06 July 2006 (06.07.2006)	
Applicant's or agent's file reference 547336WO01 F1330	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/JP2004/012289	International filing date (day/month/year) 26 August 2004 (26.08.2004)
Applicant MITSUBISHI DENKI KABUSHIKI KAISHA et al	

## 1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

## 2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

## 3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

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# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 547336WO01	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/JP2004/012289	International filing date ( <i>day/month/year</i> ) 26 August 2004 (26.08.2004)	Priority date ( <i>day/month/year</i> ) 04 September 2003 (04.09.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant MITSUBISHI DENKI KABUSHIKI KAISHA		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 26 June 2006 (26.06.2006)
Facsimile No. +41 22 338 82 70	Authorized officer  <div style="text-align: center; font-weight: bold;">Masashi Honda</div> e-mail: pt08@wipo.int

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**TRANSLATION**  
**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

<div style="border: 1px solid black; width: 100%; height: 100%;"></div>		Date of mailing (day/month/year)
Applicant's or agent's file reference <b>547336WO01</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/JP2004/012289</b>	International filing date (day/month/year) <b>26.08.2004</b>	Priority date (day/month/year) <b>04.09.2003</b>
International Patent Classification (IPC) or both national classification and IPC		
Applicant <b>MITSUBISHI DENKI KABUSHIKI KAISHA</b>		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I      Basis of the opinion
- ☐ Box No. II      Priority
- ☐ Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV      Lack of unity of invention
- ☒ Box No. V      Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI      Certain documents cited
- ☐ Box No. VII      Certain defects in the international application
- ☐ Box No. VIII      Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/012289

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/012289

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	9, 11-18	YES
	Claims	1-8, 10	NO
Inventive step (IS)	Claims	9, 11-18	YES
	Claims	1-8, 10	NO
Industrial applicability (IA)	Claims	1-18	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: JP 2000-217284 A (Toshiba Corp.), 04 August 2000, paragraph 0015, Fig. 2 (Family: none)</p> <p>Document 2: JP 2001-218429 A (Hitachi, Ltd.), 10 August 2001 (Family: none)</p> <p>Document 3: Akihiro DAIKOKU, et. al., RM-03-74 Furemu no Oryoku no Eikyo wo Kyoryo shita PM Motor no Cogging Torque Kaiseki, IEEJ Kenkyukai Shiryou, The Institute of Electrical Engineers of Japan, 06 September 2003, P.13-18</p> <p>Document 4: Akihiro DAIKOKU, et. al., RM-03-152 Gaibu Oryoku Inkaji no PM Motor no Cogging Torque ni Kansuru Jikken Kento, IEEJ Kenkyukai Shiryou, The Institute of Electrical Engineers of Japan, 28 November 2003, P.13-18</p> <p>The inventions of claims 1-8 and 10 are described in document 1 (paragraph 0015, Fig. 2), document 3 and document 4 cited in the ISR, and thus, do not possess novelty and involve an inventive step.</p> <p>Also, because the specification of the application JP 2003-312214, which is the foundation for the priority claim, does not describe the inventions of claims 1 and 10 of the present application, the priority claim is found to be invalid.</p> <p>The inventions of claims 9 and 11 through 18 are not described in any of the documents cited in the ISR and are not obvious to a person skilled in the art.</p>			